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against a house dust mite *Dermatophagoides pteronyssinus*.

### REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

Applicants have submitted a revised Sequence Listing in both paper and computer readable form as required by 37 C.F.R. 1.821(c) and (e). Amendments directing its entry into the specification have also been incorporated herein. The content of the paper and computer readable copies are the same and no new matter has been added.

Applicants note that the revised Sequence Listing has been filed to correct some minor inconsistencies between the specification and the original Sequence Listing. On page 30, line 23, of the specification, the sequence identified as SEQ ID No. 14 does not correspond exactly to the SEQ ID No. 14 shown in the original Sequence Listing. Specifically, amino acid residue number 8 of SEQ ID No 14 (in the Sequence Listing) is an isoleucine while the corresponding amino acid residue (on page 30 of the specification) is an asparagine. Also, the amino acid sequence in line 28 on page 30 of the specification does not correspond to SEQ ID No. 15 of the Sequence Listing. Thus, Applicants have amended the Sequence Listing to correspond with that recited in the specification. Specifically, amino acid residue number 8 of SEQ ID No 14 in the Sequence Listing has been amended to an asparagine and the amino acid sequence in line 28 on page 30 of the specification has been added to the revised Sequence Listing as SEQ ID No 18.

The specification has also been amended to correct some minor errors and to correspond with the addition of SEQ ID No 18.

Claim 16 has been cancelled without prejudice. Further, claims 15 and 30 have been amended to direct to the subject matter deemed enabled and allowable by the Examiner. Support for the claim amendments is readily apparent from the teachings of the specification and the original claims.

Please note that the changes to the claims have been effected to expediate the allowance of the subject matter deemed allowable by the Examiner. Applicants have filed a new related application directed to the broader embodiments of the present application. Thus, these changes to the claims should be made without prejudice as to the new application.

With regard to non-elected claim 15, since this claim is directed to a method of using the allowable compounds for treating an allergy against a house dust mite *Dermatophagoides pteronyssinus*, it is respectfully requested that this claim be rejoined under *In re Ochiai* and allowed along with the elected claims.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

In view of the foregoing amendments and remarks, it is respectfully submitted that the Application is now in condition for allowance. Such action is thus respectfully solicited.

Respectfully submitted,

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## **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

### **In the Specification**

**Page 23, the paragraph beginning at line 29 has been amended as follows:**

This was established using a similar assay procedure as described above for IgE antibodies, except that a goat anti-human IgG antibodies was used for the detection of IgG antibodies and that a 1/100 dilution of serum was used. Representative results of such an experiment are given in Figure 3, from which it can be seen that significant binding occurred in between amino acid 11 and 24, as well as in between amino acid 22 and 34. The 7-39 region of Der pII therefore contains two binding sites for IgG of non-atopic individuals.

**Page 25, the paragraph beginning at line 21 has been amended as follows:**

The compound of the invention can be prepared by recombinant cDNA technology to produce a polypeptide made of a series of repetitive units of T and B cell epitope-containing peptides. A polypeptide made of a duplicated T cell epitope derived from TT (amino acids 830 to 844 of the heavy chain) and six repetitive B cell epitopes derived from Der pII is produced by DNA technology. A sequence of two amino acid residues is inserted in between each epitope. The sequence is: D - (QYIKANSKFIGITELX)<sub>2</sub> - (CHGSEPCIIHRGKPFX)<sub>5</sub> - (CHGSEPCIIHRGKPFSR, (SEQ ID NO. 3), in which X is GG or SS.

**Page 29, the paragraph beginning at line 23 has been amended as follows:**

The peptide is used for mouse immunization. Thus, six BALB/c mice are injected in each footpad with 50 µl of an emulsion containing 50 µg of the peptide in complete Freund's adjuvant. The same injection procedure is used twice at a fortnight interval, except for the use of incomplete Freund's adjuvant. Two weeks after the last injection, the mice are bled and the serum shown to contain specific antibodies to the Der pII B cell epitope included in the synthetic peptide used for

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immunization, and to full-length Der pII protein. Regional draining lymph nodes are obtained for the preparation of T cell suspension. The latter are shown to proliferate in the presence of TT, but not in the presence of Der pII or the peptide corresponding to the B cell moiety used for immunization.

**Page 30, the paragraph beginning at line 16 has been amended as follows:**

A core peptide made of 8 lysine (K) residues is made synthetically. Each K epsilon-amine group can be substituted by a particular peptide attached to the K backbone by a peptidic link. Thus, the first 2 residues are substituted with the sequence QYIKANSKFIGITEL (SEQ ID NO. 13) corresponding to the T cell epitope of TT (amino acid 830 to 844). Residues 3 and 4 are substituted with the sequence CHGSEPCNIHRGKPF (SEQ ID NO. 14) corresponding to the Der pII-derived B cell epitope with a I28N point substitution. Residues 5 and 6 are substituted with the sequence VIIGIK containing a B cell epitope derived from Der pI as shown in Example 4. Residues 7 and 8 are substituted with the sequence PKYVKQNTLKLAT (SEQ ID NO. 158) corresponding to a major T cell epitope of the influenza A virus.

**In the Claims:**

**Claims 15 and 30 has been amended as follows.**

15. (Amended) A method for [preventing or] treating an allergy [or a disease of allergic origin] against a house dust mite *Dermatophagoides pteronyssinus*, which comprises administering the compound according to claim 18, to a patient in need thereof.

30. (Amended) The compound according to claim 18, which [prevents or treats] is used to treat an allergy against a house dust mite *Dermatophagoides pteronyssinus*.

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